A record-linkage study by Seaman et al. (1998) aimed to discover the impact of incarceration in Edinburgh Prison on the morbidity and mortality in male, HIV-infected injectors, and to shed light on HIV seroconversions during incarceration. A subsequent study by Bird & Hutchinson (2003) confirmed very high risk of drugs-related death soon after prison-release. A third study followed 636 men who had been in Glenochil Prison in 1993, for subsequent HIV diagnoses. This followed an outbreak of 14 HIV seroconversions at Glenochil Prison, 13 of which shared the same molecular signature.

Health Protection Scotland needed to understand late liver sequelae of Scotland’s injector-related hepatitis C virus (HCV) epidemic so Hutchinson et al. used record linkage to study Scotland’s ‘virtual cohort’ of HCV-diagnosed individuals. With injectors the majority, we related morbidity and mortality to time since starting to inject, as recorded on the Scottish Drug Misuse Database (SDMD). Fortuitously, we gained access to all SDMD records, enabling analysis of hospitalisations, HCV diagnoses, and cause-specific mortality. Meanwhile, our MRC-funded Addictions Cluster linked data from the Drug Data Warehouse (DDW) to the deaths register in England and Wales to analyse opioid-users’ cause-specific mortality in relation to gender and age group, behavioural risks (injecting, misuse of alcohol & benzodiazepines), criminal justice referral into drug treatment, and treatment modality.

In a seventh major study we linked Scotland’s prisoner register (1996-2007) to the deaths’ register to 31 December 2007, to examine longer-term, age-related, cause-specific mortality of the ever-incarcerated versus Scotland’s age-appropriate mortality rates. I focused on whether prison-based opioid-substitution therapy (OST) reduced drug-related death rates in 12-weeks post-release (yes) and whether the percentage of 12-weeks DRDs that occurred in the first fortnight was substantially less than 60% (no). An earlier meta-analysis suggested that reduction to 47% might be plausible. Results are, of course, as important as how we obtain them! I focus on the newest . . .

Professor Sheila Bird, OBE FRSE is visiting Professor at the University of Strathclyde’s Department of Mathematics and Statistics, and Programme Leader at the MRC Biostatistics Unit, Institute of Public Health, Cambridge. She has been a Medicines Commissioner, was the first statistician on the Appraisal Committee of NI’s National Institute for Clinical Excellence (NICE), and has served on four Royal Statistical Society Working Parties as well as on various Medical Research Council, UK government and EU Working Parties and Groups. Bird gave oral evidence to the Science and Technology Select Committee Inquiries into Scientific Advice in Emergencies and to its current inquiry into the Safety of Blood, Tissue and Organ Screening.

Her research interests include UK dietary exposure to BSE and autopsy surveillance for carriage of subclinical variant CJD; record-linkage studies for quantitative understanding of the morbidity and mortality of injection-related Hepatitis C and of drug treatment clients; randomized controlled trial of naloxone-on-release for reducing the very high risk of opioid-related death soon after prison-release; and, more generally the application of statistical methods to the criminal justice system’s treatment of drug-dependent offenders.